## Burgin Water Department Water Quality Report 2013

Water System ID: KY0840048 Manager: George Hensley 859-748-5220 CCR Contact: Michelle Russell 859-748-5220

Mailing Address: P.O. Box 323 Burgin, KY 40310 Meeting location and time: Burgin City Hall Second Tuesday at 6:30 PM

Burgin Water Department purchases water from Harrodsburg Municipal Water Department which treats surface water from the Kentucky River. An analysis of the susceptibility of Harrodsburg's water supply to contamination indicates that this susceptibility is generally moderate. There are, however, a few areas of high concern. Herrington Lake, an impoundment of Dix River, a tributary to the Kentucky River, has been identified as impaired. The condition of this lake may be indicative of conditions in the watershed that could adversely affect source water quality. Other areas of high concern intake include a railroad bridge, a highway bridge, areas of row crops, a waste generator or transporter and a KPDES permitted discharger. Finally, there are numerous permitted operations and activities and other potential contaminant sources of moderate concern within the greater watershed that cumulatively increase the potential for the release of contaminants within the area. These potential contaminant sources include everything from large capacity septic systems, to major roads, to underground storage tanks, to Tier II hazardous chemical users. The complete Source Water Assessment is available for review at the Harrodsburg Water Department.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## Information About Lead:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your local public water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

## Some or all of these definitions may be found in this report:

Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - the level of a drinking water disinfectant below which there is no known or expected risk to health.

MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

Parts per million (ppm) - or milligrams per liter, (mg/l). One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - or micrograms per liter, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Unless otherwise noted, the report level is the highest level detected. Allowable **Highest Single** Lowest Violation Levels Monthly % Measurement Likely Source Turbidity (NTU) TT No more than 1 NTU\* \* Representative samples Less than 0.3 NTU in 0.18 100 No Soil runoff of filtered water 95% of monthly samples Regulated Contaminant Test Results Contaminant Violation Likely Source of Report Range Date of [code] (units) MCL MCLG Level of Detection Contamination Sample Total Coliform Bacteria 0 N/A No 1 Nov-13 Naturally present in the # or % positive samples environment Combined radium 5 0 May-13 1.3 1.3 1.3 No to Erosion of natural deposits (pCi/L) Barium Drilling wastes: metal [1010] (ppm) 2 2 0.02 0.02 to 0.02 Feb-13 No refineries; erosion of natural deposits Copper [1022] (ppm) AL =0.041 Corrosion of household 0.003 to sites exceeding action leve 1.3 (90th Sep-12 No 1.3 0.058 plumbing systems percentile) Fluoride Water additive which [1025] (ppm) 4 4 0.89 0.89 0.89 Feb-13 No to promotes strong teeth Lead [1030] (ppb) AL = 0 Corrosion of household  $(90^{th}$ sites exceeding action leve 15 0 No 0 2.3 Sep-12 to plumbing systems percentile) Nitrate Fertilizer runoff; leaching [1040] (ppm) 10 10 0.75 0.75 0.75 Nov-13 No from septic tanks, sewage; erosion of natural deposits Total Organic Carbon (ppm) 1.40 Naturally present in (measured as ppm, but TT\*N/A 1.02 (lowest 2.37 N/A to No environment. reported as a ratio) average) (monthly ratios) \*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance. Chlorine MRDL MRDLG 0.76 Water additive used to control (ppm) = 4 **≖** 4 (highest 0.37 to 1.14 N/A No microbes. average) HAA (ppb) (all sites) 50 Byproduct of drinking water [Haloacetic acids] 60 N/A (system 25 71 N/A to No disinfection average) (range of system sites) HAA (ppb) N/A Byproduct of drinking water [Haloacetic acids] 60 N/A (high site 57 to 68 N/A No disinfection (Individual Sites) average) (range of individual sites) TTHM (ppb) (all sites) 73 Byproduct of drinking water [total trihalomethanes] 80 N/A (system 35 to 117 N/A No disinfection average) (range of system sites) TTHM (ppb) N/A Byproduct of drinking water [total trihalomethanes] 80 N/A (high site N/A No 76 to 120 disinfection.

Copies are available at our office. If you desire a copy to be mailed to you please contact our office.

average) (range of individual sites)

(Individual Sites)

## **Violation** 2013-9950409

Our water system (Burgin Water Department) recently failed to comply with a required testing procedure. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

\*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 4/1/2013 – 4/30/2013 we did not complete all monitoring or testing for total coliform bacteria, and therefore cannot be sure of the quality of your drinking water during that time.\*

There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

We are required to test for total coliform bacteria in the water distribution system each month. A sample collected on 4/17/2013 was reported with a sample site identification number that is not on the approved sample site list for our system. Samples collected at sites that are not on the approved list cannot be counted toward the total number of monthly compliance samples. This monitoring violation requires us to perform a public notification to our customers. There were no potential health effects as a result clerical errors on documents submitted to Division of Water. In the future, we will make every effort to submit documents with complete and correct information.

For more information, please contact George Hensley at (859) 748-5220 or P.O. Box 323, Burgin, KY 40310.

\*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.\*